PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P12648/MA	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/EP 03/03974	International filing date *(day/month/year)* 16.04.2003	Priority date *(day/month/year)* 23.04.2002
International Patent Classification (IPC) or both national classification and IPC G06K11/18		
Applicant SONY ERICSSON MOBILE COMMUNICATIONS AB		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the opinion
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
27.10.2003	17.08.2004
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Schmidt, R Telephone No. +49 89 2399-2491

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP 03/03974

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-4 as originally filed

Claims, Numbers

1-19 as originally filed

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

   ☐ the language of publication of the international application (under Rule 48.3(b)).

   ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐ contained in the international application in written form.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority in written form.

   ☐ furnished subsequently to this Authority in computer readable form.

   ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

   ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:

   ☐ the claims, Nos.:

   ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	2-4,6,7,10-12,15,16,18,19
	No:	Claims	1,5,8,9,13,14,17
Inventive step (IS)	Yes:	Claims	15
	No:	Claims	1-14,16-19
Industrial applicability (IA)	Yes:	Claims	1-19
	No:	Claims	

2. Citations and explanations

   see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following documents:
D1: WO 00/20959 A (GATEWAY INC) 13 April 2000 (2000-04-13)
D2: GB-A-2 279 750 (INWOOD DAVID JOHN ;RYAN PAUL THOMAS (GB)) 11 January 1995 (1995-01-11)
D3: EP-A-1 073 004 (NOKIA MOBILE PHONES LTD) 31 January 2001 (2001-01-31)

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1,5,8,9,13,14, and 17 is not new in the sense of Article 33(2) PCT.

2.1 Regarding the subject-matter of claim 1, document D1 discloses (the references in parentheses applying to this document):

Means for enabling actuation of a pointing device, which comprises an activity sensor for sensing activation of the pointing device, said activity sensor comprising a threshold comparator (cf. figure 4 and page 6, lines 18-19: amplifier 90, level switch 96), wherein the activity sensor is adapted to enable energization of the pointing device, when the sensed activation of the pointing device exceeds a threshold (cf. page 7, lines 15-27).

Hence, the subject-matter of claim 1 is not novel.

2.2 According to document D1, said activity sensor comprises a detector device for sensing a capacitance change at the pointing device and said detector device comprises a high impedance amplifier (cf. figure 4 and page 7, lines 15-27).

Hence, the subject-matter of claims 5 and 8 is not novel as well.

2.3 Claim 9 concerns an input device comprising a pointing device and an activity sensor, wherein the features of said activity sensor are identical to those of the device defined in claim 1. Since D1 also discloses an input device (cf. abstract) employing an activity sensor as already discussed in paragraph 2.1 above, the subject-matter of claim 9 lacks novelty as well.

2.4 The same applies for the subject-matter of claims 13 and 17 because the features added by these claims are identical to those added by claims 5 and 8.

Hence, the subject-matter of claims 13 and 17 is not novel.

2.5 The pointing device according to D1 employs a ball which is located next to the touch plate 60 so that said ball is necessarily capacitively connected to the detector device.

Hence, the subject-matter of claim 14 is novel.

3 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 2-4, 6, 7, 10-12, 16, 18, and 19 does not involve an inventive step in the sense of Article 33(3) PCT.

3.1 The features added by claims 2-4, 6, and 7 are not disclosed in D1. However, document D2 discloses an activity sensor for a portable device which shows the features added by the following claims:

Claim 2:	Adjustable threshold (cf. D2, page 9, paragraph 2, "... the threshold may (be) adjusted manually ...")
Claim 3:	The activity sensor may comprise a timer adapted to switch off the energization of the pointing device after a time has elapsed without any sensed activation of the pointing device (cf. D2, bridging paragraph between pages 7 and 8).
Claims 6/7:	Said detector device comprises an oscillator with a resonant circuit wherein the capacitance of the pointing device forms part of the resonant circuit (cf. D2, figure 8 and associated description).

It is furthermore generally known to a person skilled in the art that the shutdown time of a timer as defined by the features of claim 3 may be adjustable, at least at the time of the production of the device.

Since the problem to be solved by the subject-matter of the above mention claims, i.e. to save energy in a battery powered device, is also addressed in D2, the skilled person would regard it a normal design procedure to combine all the features set out in each of claims 2-4, 6, and 7.

3.2 The same reasoning applies, mutatis mutandis, to the subject-matter of the claims 10-12, 16 and 17, which add corresponding features to the device defined in independent claim 9.

4 Document D3 discloses a mobile phone comprising a trackball input device. Claims 18 and 19 are directed to the mere combination of a portable device or mobile phone and an input device as defined in claims 9 - 17. Since the possibility to combine a mobile phone/portable device and a trackball input device is generally known from documents like D3, the present combination only represents an obvious design option for a person skilled in the art.